Claims

1. A computer-implemented method for creating a graphical data flow program, wherein the graphical data flow program is operable to invoke a method of an object, wherein the method for creating the graphical data flow program operates in a computer including a display and a user input device, the method for creating the graphical data flow program comprising:

displaying on the screen a node in the graphical data flow program in response to user input, wherein the node is operable to invoke a method of an object;

configuring the node to receive information on the object in response to user input, wherein said configuring comprises connecting the information on the object to an input of the node;

wherein, during execution of the graphical data flow program, the node is operable to invoke the method of the object.

2. The computer-implemented method of claim 1, wherein the node includes an object reference input for receiving a reference to the object;

wherein said configuring comprises connecting said object reference input of the node to receive the reference to the object;

wherein the node receives the information on the object on the object reference input during execution of the graphical data flow program.

3. The computer-implemented method of claim 2, wherein said configuring comprises:

displaying on the screen an object reference node which includes an object reference output that provides the reference to the object; and

connecting the object reference output of the object reference node to the object reference input of the node.

4. The computer-implemented method of claim 3, further comprising:

executing the graphical data flow program, wherein said executing includes propagating the reference to the object from the object reference output of the object reference node to the object reference input of the node

5. The computer-implemented method of claim 1, further comprising:

executing the graphical data flow program, wherein said executing includes propagating the information on the object to the node.

6. The computer-implemented method of claim 1, wherein the object is comprised in a server, wherein said configuring comprises:

displaying on the screen a list of libraries associated with one or more servers;

selecting a library from the list of libraries in response to user input

displaying on the screen a list of possible classes from the selected library;

selecting a class from the list of possible classes in response to user input;

wherein the object is instantiated from the class.

7. The computer-implemented method of claim 1, further comprising:

constructing execution instructions in response to the graphical data flow program, wherein the execution instructions are executable to invoke the method of the object; and

executing said execution instructions, wherein the node invokes the method of the object during said executing.

8. The computer-implemented method of claim 7, wherein said executing includes propagating the information on the object to the node.

9. The computer-implemented method of claim 1, wherein the graphical data flow program is operable to invoke the method of the object for performing instrumentation functions on an instrument.

10. The computer-implemented method of claim 1, wherein the graphical data flow program includes a block diagram and a front panel, wherein the block diagram includes the node.

11. A computer-implemented method for creating a graphical data flow program, wherein the graphical data flow program is operable to invoke a property of an object, wherein the method for creating the graphical data flow program operates in a computer including a display screen and a user input device, the method for creating the graphical data flow program comprising:

displaying on the screen a node in the graphical data flow program in response to user input, wherein the node is operable to invoke a property of an object;

configuring the node to receive information on the object in response to user input;

wherein, during execution of the graphical data flow program, the node is operable to invoke the property of the object.

12. The computer-implemented method of claim 11, wherein the node includes an object reference input for receiving a reference to the object;

wherein said configuring comprises connecting the object reference input of the node to receive the reference to the object;

wherein the node receives the information on the object on the object reference input during execution of the graphical data flow program.

13. The computer-implemented method of claim 12, wherein said configuring comprises:

displaying on the screen an object reference node which includes an object reference output that provides the reference to the object; and

connecting the object reference output of the object reference node to the object reference input of the node.

14. The computer-implemented method of claim 11, further comprising:

executing the graphical data flow program, wherein said executing includes propagating the reference to the object from the object reference output of the object reference node to the object reference input of the node.

15. The computer-implemented method of claim 11, further comprising:

executing the graphical data flow program, wherein said executing includes propagating the information on the object to the node.

16. The computer-implemented method of claim 11, wherein the object is comprised in a server, wherein said configuring comprises:

displaying on the screen a list of libraries associated with one or more servers;

selecting a library from the list of libraries in response to user input

displaying on the screen a list of possible classes from the selected library;

selecting a class from the list of possible classes in response to user input;

wherein the object is instantiated from the class.

17. The computer-implemented method of claim 11, further comprising:

constructing execution instructions in response to the graphical data flow program, wherein the execution instructions are executable to invoke the property of the object; and

executing said execution instructions, wherein the node invokes the property of the object during said executing.

18. The computer-implemented method of claim 11, wherein the node is operable to get and/or set one or more properties of the object.

19. The computer-implemented method of claim 11, wherein the graphical data flow program is operable to invoke the property of the object for performing instrumentation functions on an instrument.

20. The computer-implemented method of claim 11, wherein the graphical data flow program includes a block diagram and a front panel, wherein the block diagram includes the node.

21. A memory medium comprising program instructions for creating a graphical data flow program, wherein the graphical data flow program is operable to invoke a method of an object, wherein the program instructions are executable to:

display on the screen a node in the graphical data flow program in response to user input, wherein the node is operable to invoke a method of an object;

configure the node to receive information on the object in response to user input, wherein said configuring comprises connecting the information on the object to an input of the node;

wherein, during execution of the graphical data flow program, the node is operable to invoke the method of the object.

22. The memory medium of claim 21, wherein the node includes an object reference input for receiving a reference to the object;

wherein said configuring comprises connecting the object reference input of the node to receive the reference to the object;

wherein the node receives the information on the object on the object reference input during execution of the graphical data flow program.

23. The memory medium of claim 22, wherein said configuring comprises:

displaying on the screen an object reference node which includes an object reference output that provides the reference to the object; and

connecting the object reference output of the object reference node to the object reference input of the node.

24. The memory medium of claim 23, wherein the program instructions are further executable to:

execute the graphical data flow program, wherein said executing includes propagating the reference to the object from the object reference output of the object reference node to the object reference input of the node

25. The computer-implemented method of claim 1, wherein the program instructions are further executable to:

construct execution instructions in response to the graphical data flow program, wherein the execution instructions are executable to invoke the method of the object; and

execute said execution instructions, wherein the node invokes the method of the object during said executing.

26. The memory medium of claim 25, wherein said executing includes propagating the information on the object to the node.

27. The memory medium of claim 21, wherein the graphical data flow program is operable to invoke the method of the object for performing instrumentation functions on an instrument.

28. The memory medium of claim 21, wherein the graphical data flow program includes a block diagram and a front panel, wherein the block diagram includes the node.

29. A memory medium comprising program instructions for creating a graphical data flow program, wherein the graphical data flow program is operable to invoke a property of an object, wherein the program instructions are executable to:

display on the screen a node in the graphical data flow program in response to user input, wherein the node is operable to invoke a property of an object;

configure the node to receive information on the object in response to user input;

wherein, during execution of the graphical data flow program, the node is operable to invoke the property of the object.

30. The memory medium of claim 29, wherein the node includes an object reference input for receiving a reference to the object;

wherein said configuring comprises connecting the object reference input of the node to receive the reference to the object;

wherein the node receives the information on the object on the object reference input during execution of the graphical data flow program.

31. The memory medium of claim 30, wherein said configuring comprises:

displaying on the screen an object reference node which includes an object reference output that provides the reference to the object; and

connecting the object reference output of the object reference node to the object reference input of the node.

32. The memory medium of claim 29, wherein the program instructions are further executable to:

execute the graphical data flow program, wherein said executing includes propagating the reference to the object from the object reference output of the object reference node to the object reference input of the node.

33. The memory medium of claim 29, wherein the program instructions are further executable to:

construct execution instructions in response to the graphical data flow program, wherein the execution instructions are executable to invoke the property of the object; and

execute said execution instructions, wherein the node invokes the property of the object during said executing.

34. The memory medium of claim 29, wherein the node is operable to get and/or set one or more properties of the object.

35. The memory medium of claim 29, wherein the graphical data flow program is operable to invoke the property of the object for performing instrumentation functions on an instrument.

36. The memory medium of claim 29, wherein the graphical data flow program includes a block diagram and a front panel, wherein the block diagram includes the node.

37. A memory medium which stores a graphical data flow program;

wherein the graphical data flow program includes a node which is operable to invoke a method of an object;

wherein the node includes an input which is configurable to receive information on the object in response to user input;

wherein, during execution of the graphical data flow program, the node is operable to invoke the method of the object.

38. A memory medium which stores a graphical data flow program;

wherein the graphical data flow program includes a node which is operable to invoke a property of an object;

wherein the node includes an input which is configurable to receive information on the object in response to user input;

wherein, during execution of the graphical data flow program, the node is operable to invoke the property of the object.

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